

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :	Jeffery S. Haas et al	Docket No. :	IL-11088
Serial No. :	10/788,558	Art Unit :	1797
Filed :	02/26/2004	Examiner :	Samuel P. Siefke
For :	EXPLOSIVES TESTER		

Honorable Commissioner for Patents
Alexandria, VA 22313-1450

Attention: Board of Patent Appeals and Interferences

Dear Sir:

APPELLANTS' REPLY BRIEF (37 C.F.R. § 1.192)

This Reply Brief is submitted in response to the Examiner's Answer mailed May 27, 2008. One copy of the Reply Brief is being transmitted per 37 C.F.R. § 41.37. Appellants' Brief is relied upon and additionally Appellants provide the following responses to specific points in the Examiner's Answer.

Reply to Examiner's Answer Regarding Appellants' "flat disk sample collection pad" Claim Element

The Examiner's Answer states: "Kardish does not teach ... a flat disk shaped sample pad." (Page 5, lines 15-16 of the Examiner's Answer) The Examiner's Answer subsequently states: "Regarding claim 13 and the disk shaped sample pad. Such change in shape is not considered a novel patentable feature because this is simply a

matter of choice, which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed shape of the sample pad was significant. *in re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). The disk shape of a sample pad provides no patentable distinction over the rectangular test pad configuration of Kardish. The rectangular and round sample pads are interchangeable equivalents."

Appellants' "flat disk sample collection pad" - More Than a Change in Shape

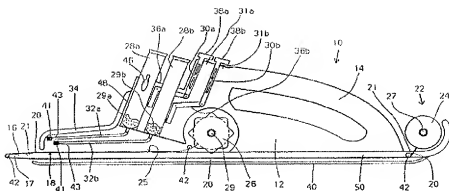
Appellants' claim 13 specifies much more than a "change in shape" of a claim element. The relevant portions of Appellants' claim 13 regarding the flat disk sample collection pad claim element are described with the following claim limitations:

"a flat disk sample collection pad for exposure to said test location, exposure to said first explosives detecting reagent, and exposure to said second explosives detecting reagent, said flat disk sample collection pad operatively connected to said tester body,"

"an environmental means for receiving said flat disk sample collection pad, said environmental means being a heater or a dryer operatively connected to said tester body for heating or drying said flat disk sample collection pad and testing the test location for the explosives."

Appellants' flat disk sample collection pad claim element is "operatively connected to said tester body" and Appellants' "environmental means for receiving said flat disk sample collection pad, said environmental means being a heater or a dryer operatively connected to said tester body for heating or drying said flat disk sample collection pad and testing the test location for the explosives."

The Kardish reference "uses a feed reel and take-up reel to draw a sampling area on a roll of film to a pointed tip" as illustrated in FIG. 1 and described in the portions of the specification reproduced below.



Appellants' "flat disk sample collection pad" claim element is very different from the Kardish "roll 22 of substrate 20." Applicants' "flat disk sample collection pad" claim element would not work in the Kardish reference and would destroy the operability of the Kardish reference device. Applicants' "flat disk sample collection pad" would not "roll" and would not be taken up by the Kardish "take-up reel 26 for advancing substrate 20."

Appellants' flat disk sample collection pad claim element is more than a "change in shape" of a claim element. The function of Appellants' flat disk sample collection pad claim element is different from the Kardish reference roll of film. The Kardish reference roll of film is used in a feed reel and take-up reel to draw a sampling area on the roll of film to the pointed tip of the Kardish reference. Appellants' flat disk sample collection pad is removable for swiping a suspect area for explosives.

No Objective Evidence Indicating Obviousness

The findings of fact in the Examiner's Answer are that "Kardish does not teach ... a flat disk shaped sample pad." (Page 5, lines 15-16 of the Examiner's Answer)

Further, the Dietze et al reference and the Alleged Admitted Prior Art reference do not show Appellants' "flat disk sample collection pad" claim element. Since the Kardish reference, the Dietze et al reference and the Alleged Admitted Prior Art reference do not show Appellants' "flat disk sample collection pad" claim element; the

Examiner's Answer does not provide objective evidence indicating obviousness of Appellants' invention and the rejection should be reversed.

Reply to Examiner's Answer Regarding Appellants' "heater or dryer, or both employed under flat disk sample collection pad" Claim Element

The Examiner's Answer states: "Kardish does not teach providing a heater or dryer, or both employed under the sample area" (Page 5, lines 15-26 of the Examiner's Answer) The Examiner's Answer further states: "Dietze teaches a heater that is placed in thermal contact with a test strip in order to achieve rapid and selective heating of individual test fields on the test strip ... it would have been obvious to one having an ordinary skill in the art at the time of the invention to modify Kardish to employ a heater that is below and in thermal contact with the test strip in order to provide rapid and selective heating of the sample on the test strip." (Page 5, lines 15-23 and Page 6, lines 1-2 of the Examiner's Answer)

The relevant portions of Appellants' claim 13 regarding the "heater or a dryer operatively connected to said tester body for heating or drying said flat disk sample collection pad" claim element are described with the following claim limitations:

a heater or a dryer operatively connected to said tester body for heating or drying said flat disk sample collection pad and testing the test location for the explosives.

The findings of fact in the Examiner's Answer are that the Kardish reference does not teach providing a heater or dryer, or both employed under the sample area.

Appellants point out that the Dietze reference has nothing to with detection of explosives and does not show or suggest Appellants' tester apparatus for testing for explosives. Dietze describes a blood and urine analytical system and not Appellants' claimed "tester for testing for explosives associated with a test location."

Teaching-Suggestion-Motivation (TSM) Test

The Examiner's Answer and the Final Rejection do not meet the teaching-suggestion-motivation (TSM) test. The TSM test is "whether there is something in the prior art to suggest the desirability, and thus the obvious nature, of the combination of the references." The Examiner's Answer and the Final Rejection do not point to anything in the prior art to suggest the desirability, and thus the obvious nature, of the combination of the references. Further there are no "other "reasons" for combining the Kardish reference, the Dietze et al reference, and the Alleged Admitted Prior Art reference.

There would be no reason for combining the Dietze reference device with the Kardish reference device and the Examiner's Answer does not provide objective evidence indicating obviousness of combining the Dietze reference device with the Kardish reference device. Since the Kardish reference, the Dietze et al reference, and the Alleged Admitted Prior Art reference do not show Appellants' "a heater or dryer, or both employed for heating or drying said flat disk sample collection pad" claim element; the Examiner's Answer does not provide objective evidence indicating obviousness of Appellants' invention and the rejection should be reversed.

Reversible Error in Examiner's Answer's Failure to Give Proper Weight to Appellants' Secondary Considerations

The Examiner's Answer states: "the Examiner has found no nexus between the secondary evidence and the claimed invention."

This is clearly contrary to the evidence in the record. The Declarations by Catherine Elizondo and Eddie E. Scott, documents #1 and #2 in the Evidence Appendix of Appellants' Appeal Brief establish a nexus between the secondary considerations evidence and Appellants' claimed invention. The declaration by Catherine Elizondo states: "I confirm that the explosives detector called the Easy Livermore Inspection Test for Explosives or ELITE has been licensed to Field Forensics Inc. I negotiated the license

agreement between The Regents of the University of California and Field Forensics Inc. of St. Petersburg, Florida and am familiar with the technology licensed. One of the inventions licensed by the license agreement is Record of Invention IL-11088. The subject patent application IL-11088 is a patent application based upon Record of Invention IL-11088 and the subject patent application IL-11088 is one of the patent applications licensed to Field Forensics Inc. under the license agreement.” (Page 2, 4th Paragraph, Declaration by Catherine Elizondo, Document #1 in the Evidence Appendix of Appellants’ Appeal Brief)

The declaration by Eddie E. Scott states: “I have reviewed the license agreement between The Regents of the University of California and Field Forensics Inc. of St. Petersburg, Florida. I confirm that the explosives detector called the Easy Livermore Inspection Test for Explosives or ELITE has been licensed to Field Forensics Inc. One of the inventions licensed by the license agreement is Record of Invention IL-11088. The subject patent application IL-11088 is a patent application based upon Record of Invention IL-11088 and the subject patent application IL-11088 is one of the patent applications licensed to Field Forensics Inc. under the license agreement.” (Page 2, Last Paragraph and Page 3 First Paragraph, Declaration by Eddie E. Scott, Document #2 in the Evidence Appendix of Appellants’ Appeal Brief)

Secondary Considerations Support NonObviousness of Appellants’ Invention

The Examiner’s Answer’s contains reversible error because it fails to give proper weight to Appellants’ “Secondary Considerations.” It is unusual for there to be any “secondary considerations” for an invention in a patent application. It is therefore very unusual for Appellants to be able to present the following four separate secondary considerations that establish nonobviousness of Appellants’ invention of claims 1-24 on appeal:

- (1) Appellants’ invention has been has been licensed,
- (2) Appellants’ invention has obtained commercial success,

(3) Appellants' invention has obtained recognition by peers and praise by others, and

(4) Appellants' invention Applicants' invention fulfills an important and long felt need.

Invention Has Been Licensed

The May 4, 2006 issue of the *Valley Times* newspaper states, "The lab has licensed the technology to Field Forensics Inc. of St. Petersburg, Fla." (Document #3 in the Evidence Appendix of Appellants' Appeal Brief)

The May 4, 2006 News Release "Screening tool to help detect explosives nets technology transfer award for LLNL researchers" by the Lawrence Livermore National Laboratory states, "The technology has been licensed to Field Forensics Inc., a St. Petersburg, Fla., company, and went on the market last October." (Document #4 in the Evidence Appendix of Appellants' Appeal Brief)

The Declarations by Catherine Elizondo and Eddie E. Scott. Documents #1 and #2 in the Evidence Appendix of Appellants' Appeal Brief)

Invention Has Obtained Commercial Success

Field Forensics Inc. (FFI), Applicants' licensee, sells models of Applicants' claimed invention worldwide. (Document #5 in the Evidence Appendix of Appellants' Appeal Brief)

Invention Has Obtained Recognition by Peers & Praise by Others

The article "Pocket-sized Test Detects Trace Explosives," in the October 2006 issue of *Science & Technology Review (S&TR)* (Document #6 in the Evidence Appendix of Appellants' Appeal Brief) contains the following statements:

"SECURITY forces throughout the world need detection tools that can quickly and accurately locate small amounts of explosives. Technology developed by Lawrence Livermore will provide emergency response, law-enforcement, and military personnel with an easy-to-use explosives detector small enough to carry in a shirt pocket. This technology, called

E.L.I.T.E.TM (Easy Livermore Inspection Test for Explosives), is inexpensive and requires minimal training for deployment.”

“The E.L.I.T.E. card technology was developed by a team of scientists and engineers from the Laboratory’s Forensic Science Center (FSC) and Center for Energetic Materials. Led by FSC deputy director John Reynolds, the team won a 2006 R&D 100 Award for the new technology.”

“The product, which also received a 2006 Excellence in Technology Transfer Award from the Federal Laboratory Consortium, is marketed by Field Forensics, Inc., of Florida.”

“Since October 2005, when units became commercially available, Field Forensics has sold E.L.I.T.E. cards to many government agencies, including the Department of Homeland Security, New York State Police, Royal Canadian Mounted Police, and Queensland (Australia) Police.”

The article “FLC AWARDS – 2006 AWARDS FOR EXCELLENCE IN TECHNOLOGY TRANSFER DEPARTMENT OF ENERGY - Lawrence Livermore National Laboratory - ELITE: Easy Livermore Inspection Tester for Explosives” in the Department of Energy (DOE) website (Document #7 in the Evidence Appendix of Appellants’ Appeal Brief) contains the following statements:

“International terrorist activity has increased markedly in recent years, spurring demand by security agencies worldwide for efficient, accurate explosives detection capabilities.”

“To meet this need, Lawrence Livermore National Laboratory (LLNL) perfected a disposable, portable, highly accurate explosives detector.”

“Field Forensics is manufacturing 500 ELITE cards for DHS and began delivery in October 2005.”

“In autumn 2005, Field Forensics introduced the ELITE detection card and associated technology to a broader audience at an annual security conference attended by many state law enforcement agencies.”

The article “FLC’s Tech Transfer Award Winners” in the June/July issue of Innovation: America’s Journal of Technology Commercialization” (Document #8 in the Evidence Appendix of Appellants’ Appeal Brief) contains the following statements:

"More than 700 laboratories and research centers—representing almost all federal departments and agencies—conduct over \$100 billion in research and development annually and employ more than 100,000 scientists and engineers. The Awards for Excellence in Technology Transfer are presented each year to FLC member laboratories and their partners for successfully transferring federally developed technologies."

"Lawrence Livermore National Laboratory ELITE: Easy Livermore Inspection Tester for Explosives Summary: A disposable, portable, highly accurate explosives detector. The ELITE detection card is highly sensitive to more than 30 explosives, making it one of the most effective detection systems available."

"Transfer: Field Forensics, Inc. responded to a Federal Business Opportunities announcement of the ELITE licensing opportunity and was chosen as the licensee."

A copy of the article "'FLC's Tech Transfer Award Winners" in the June/July issue of Innovation: America's Journal of Technology Commercialization" is attached.

Applicants' Invention Fulfills an Important and Long Felt Need

The 08/23/2006 article "The Three Sectors of Society That Rely on Explosives Detection," <http://www.explosives-detection.info/the-three-sectors-of-society-that-rely-on-explosives-detection.html>, (Document #9 in the Evidence Appendix of Appellants' Appeal Brief) shows that there is an important and long felt need for explosives detection.

The July 2005 article "HomelandDefenseStocks.com Reports: As Terrorist Attacks Continue, Need for Explosives Detection System Technology Surges," in www.HomelandDefenseStocks.com, (Document #10 in the Evidence Appendix of Appellants' Appeal Brief) states, "www.HomelandDefenseStocks.com (HDS) an investor news portal for the homeland defense and security sector, reports on the need for explosives detection system technologies as threats of terrorist attacks continue."

Summary

The Examiner's Answer contains reversible error because it does not establish a "Prima Facie Case of Obviousness" in combining "Kardish" and "Dietze" and the "Alleged Admitted Prior Art" references. The references do not disclose many Applicants' claim limitations, there is no reason for combining the references, and there would not be a reasonable expectation of success in combining the references. Appellants "secondary considerations" establish nonobviousness of Appellants' invention of claims 1-24 on appeal. The rejection of Appellants' claims on appeal should be reversed. It is respectfully requested that Appellants' claims 1-24 on appeal be allowed.

Respectfully submitted,

By: Eddie E. Scott

Eddie E. Scott

Lawrence Livermore National Laboratory (LLNL)

7000 East Avenue, Mail Code L-703

Livermore, CA 94550

Attorney for Appellants

Registration No. 25,220

Telephone No. (925) 424-6897

Date: July 22, 2008